

CLAIMES

1. A heat transfer sheet comprising a support, a light-to-heat converting layer and an image forming layer, wherein the image forming layer contains at least a white pigment and an amorphous organic polymer having a softening point of 40°C to 150°C, an average particle size of the white pigment is from 0.01 μm to 0.32 μm , an amount of the white pigment is from 40% by weight to 90% by weight based on the total weight of the image forming layer, an amount of the amorphous organic polymer is from 10% by weight to 60% by weight based on the total weight of the image forming layer, and a thickness of the image forming layer is from 0.5 μm to 3.0 μm .
2. The heat transfer sheet as claimed in Claim 1, wherein the white pigment is at least one white pigment selected from titanium oxide, aluminum oxide and silicon oxide.
3. The heat transfer sheet as claimed in Claim 1, wherein the image-forming layer contains titanium oxide having an average particle size of from 0.15 μm to 0.32 μm .
4. The heat transfer sheet as claimed in Claim 1, wherein the light-to-heat converting layer contains at least a polyamideimide resin or a polyimide resin as a binder.
5. The heat transfer sheet as claimed in Claim 1, wherein the light-to-heat converting layer contains a cyanine dye as a light-to-heat converting agent.
6. The heat transfer sheet as claimed in Claim 1, wherein

the image forming layer contains at least one of a blue pigment and a fluorescent brightening agent.

7. The heat transfer sheet as claimed in Claim 6, wherein the blue pigment is at least one blue pigment selected from ultramarine blue and organic blue pigments.

8. The heat transfer sheet as claimed in Claim 1, wherein hue of the image-forming layer after image recording satisfies the following conditions when measured on a black backing:

L^* is not less than 70;

a^* is from -3.0 to 0 and

b^* is from -6.0 to -3.0.

9. The heat transfer sheet as claimed in Claim 8, wherein b^* is from -6.0 to -3.0.

10. The heat transfer sheet as claimed in Claim 1, wherein an opacifying ratio of the image forming layer is not less than 55%.

11. The heat transfer sheet as claimed in Claim 1, wherein thickness of the image forming layer is from 0.5 μm to 1.8 μm .

12. The heat transfer sheet as claimed in Claim 1, wherein absorbance (A) of the light-to-heat converting layer at an absorption wavelength of a laser beam used for image recording is from 1.0 to 2.0 and a ratio (A/X) of the absorbance (A) of the light-to-heat converting layer to thickness (X) (μm unit) of the light-to-heat converting layer is 2.5 to 3.2.

13. The heat transfer sheet as claimed in Claim 1, which further

comprises an intermediate layer between the light-to-heat converting layer and the image forming layer.

14. The heat transfer sheet as claimed in Claim 13, wherein the intermediate layer contains at least an ionomer resin or polyvinyl alcohol.

15. The heat transfer sheet as claimed in Claim 1, wherein an extinction coefficient of the light-to-heat converting layer at a wavelength of an active ray is not more than 1.3.

16. An image forming material which comprises an image receiving sheet having an image receiving layer and the heat transfer sheet as claimed in any one of Claims 1 to 15, and is used by superposing the image forming layer on the image receiving layer of image receiving sheet so that the image forming layer faces the image receiving layer, irradiating the image forming layer with a laser beam, and transferring the irradiated area of the image forming layer onto the image receiving layer of image receiving sheet to perform image recording.

17. An image forming method comprising preparing the image forming material as claimed in Claim 16, superposing the image forming layer on the image receiving layer of image receiving sheet so that the image forming layer faces the image receiving layer, irradiating the image forming layer with a laser beam, and transferring the irradiated area of the image forming layer in the state of a thin film onto the image receiving layer of

image receiving sheet.